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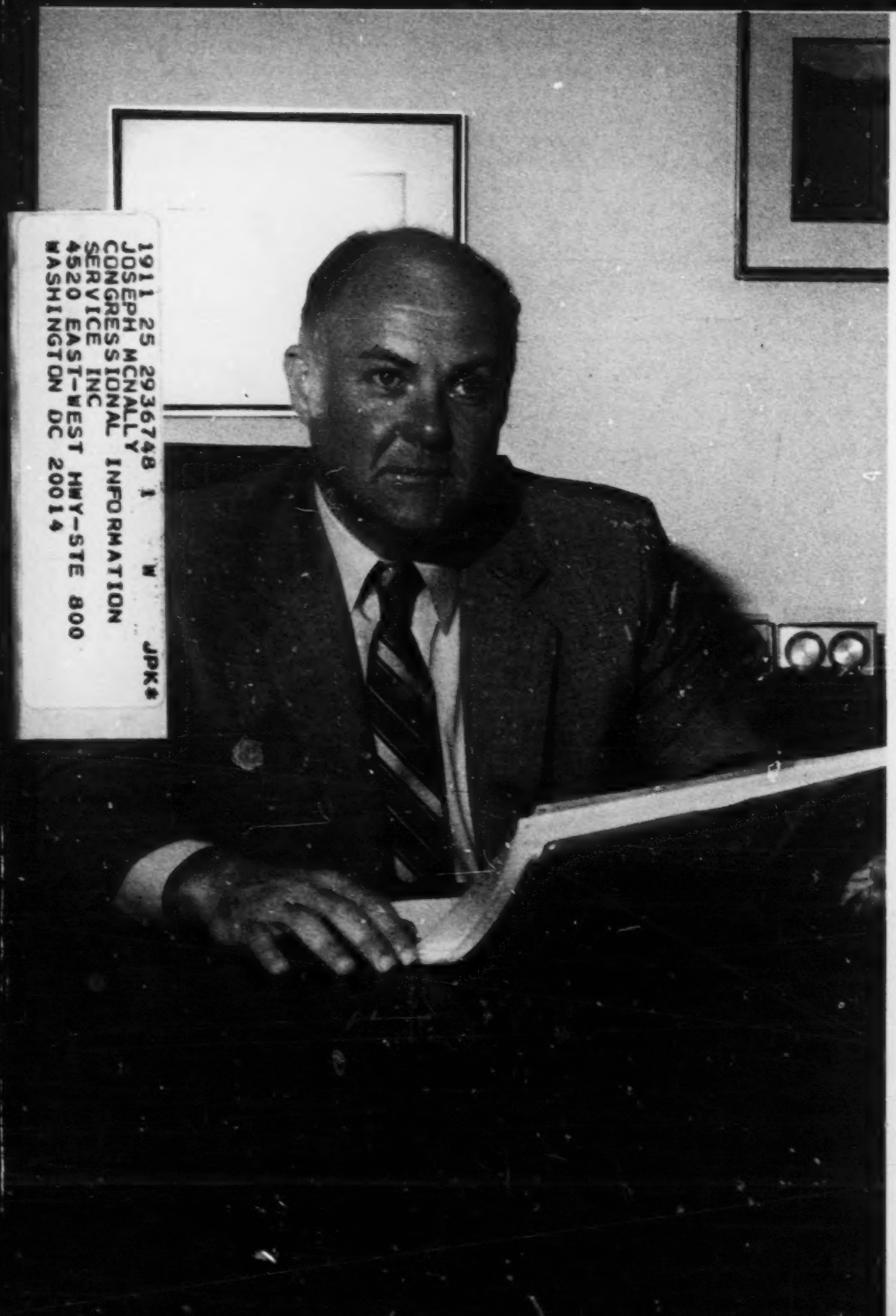
November 1981

PurchasingWorld



What's Ahead

Inventory charges have hit new highs, according to our latest survey. Almost 80% of PMs say carrying costs are now 30% per year or more (p. 6)

Productivity will improve, but not by much. A number of factors in the mature U.S. economy will make large advances difficult if not impossible (p. 60).

Steel prices will advance at a slower rate next year, although a modest improvement in overall demand is expected (p. 66).

Energy tags should remain fairly stable next year, barring massive problems growing out of Sadat's assassination (p. 90).

Information systems for better purchasing —page 34

John Overton, manager of procurement for Beech Aircraft, is one of many purchasing managers who have put computers to work to save money and improve operations. How Beech and three other companies have benefited from automation is described in our cover feature.

PurchasingWorld®

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Helping you manage the business of buying

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* Metalworking edition ** Regional edition

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Inventory costs: Up, up, and away

Consider yourself one of the lucky few if you're paying less than 2½% a month (less than 30% on an annual basis) to carry and maintain inventories.

Indeed, almost four out of every five buyers surveyed in a new nationwide ***PurchasingWorld*** survey say that they're now being hit with outsized 30%-per-year and higher charges. It's all in sharp contrast to the findings of a similar ***PurchasingWorld*** survey taken in early 1980 (almost two years ago) when 40% of the respondents were in the under-30%-a-year cost category.

As might be expected, sky-high interest rates are blamed for most of the recent increases—though such other cost factors as labor and insurance are also cited as contributing to the runup.

Some other specific findings:

■ **Increases over the past year:** There is considerable variation here (see chart). But the average of all respondents comes out in the 5-6 percentage point range. It suggests that close to ½% a month has been added onto carrying costs since last fall.

■ **The role of interest rates:** Costs of this one key factor range up to 20% annually—with money, on average, accounting for at least half of all inventory carrying costs—and in some cases as much as three-fourths of the total.

■ **Reliance on formulas:** The overwhelming majority of respondents use some kind of order formula that plugs in carrying costs as a key variable in big volume purchases.

■ **Price hedging:** Big carrying cost advances have clearly had a major impact here—as PMs strive to keep down overall holdings. Specifically, 58% of the respondents tell of doing much less forward buying to beat announced price hikes. And another 29% admitting to somewhat less hedging than they were doing just a year or so ago.

■ **Reliance on distributors:** An increasing number of purchasing managers say they're going the service center route in an effort to shift some of the inventory burden further upstream. The pertinent figures here: 40% are doing much more buying on the distributor level, with another 25% beginning to step up their activity on this front.

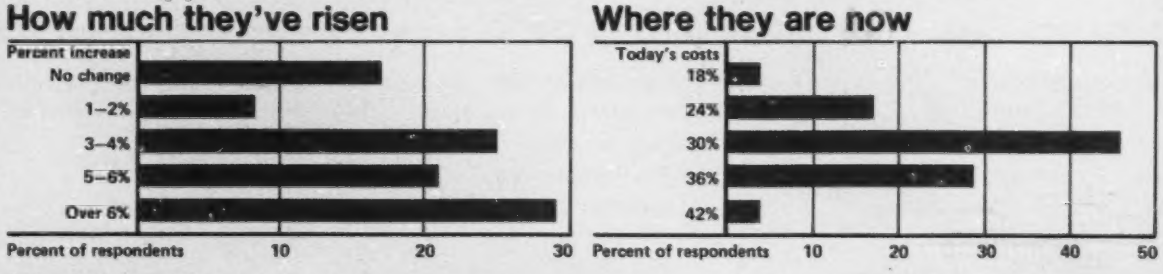
Worth noting in this respect: Two years ago, only 20% of the queried PMs admitted to doing much more buying from wholesalers. This trend, incidentally, would seem to be confirmed by the Steel Service Center Institute which reports overall member orders coming in at a relatively faster clip than reported by the steel industry as a whole.

But less price hedging and more distributor buying are only part of the typical buyer's strategy to keep inventories and, hence, inventory carrying costs down to manageable levels. Other approaches mentioned by respondents include (1) consignment buying, (2) more vendor stocking, (3) sophisticated computer reordering techniques, (4) making adjustments to production schedules, (5) better sales forecasting, and (6) blanket orders.

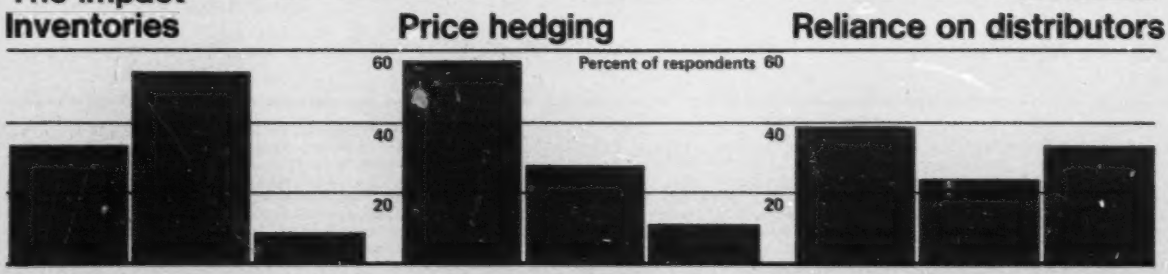
All these approaches are not without some risk. But as one Midwestern purchasing executive sums it up, "we're now willing to take limited risks. It is something that has to be done if we're to keep inventory carrying charges within bounds and remain competitive." ***PW***

Trends in inventory carrying cost

What's happened



The impact



PW Predicts...

By Robert S. Reichard, prices, economics editor

Semiconductor prices may bottom out soon

The long slide in semiconductor prices may be nearing an end. Certainly, it would be unrealistic to expect a repeat of this year when some quotes dropped more than 50%.

Commenting on the anticipated firming, Robert Royce, vice chairman of Intel and chairman of the Semiconductor Industry Association, notes that "prices can't go much lower." He adds that nobody can afford to subsidize the customer as much as the industry has done over the past year.

In any event, further substantial reductions in memory devices (for example, the 16K dynamic RAM fell from $2.75 all the way down to $1.25) now seems highly unlikely.

But the industry is basing its projections for firming prices on more than just mounting cost pressures. Most suppliers, for instance, are counting on a substantial pickup in demand. Right now, 1982 forecasts call for a 17% increase in sales. That's enough to bring totals up to $10.91 billion, and represents a sharp reversal from 1981 when dollar totals are expected to be off by close to 7%.

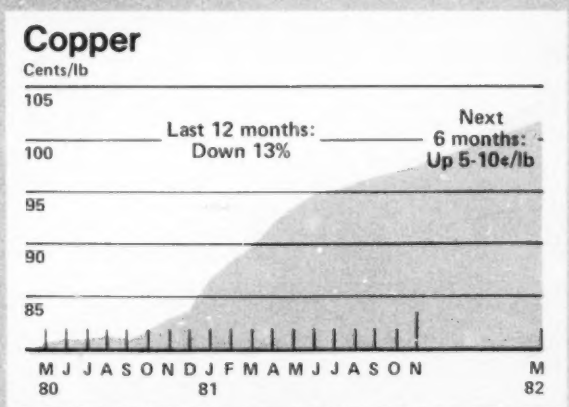
And preliminary indications suggest an even better year for 1983. Sales at that time should jump by almost 24%—bringing the total up to over $12.5 billion.

Steel

Fourth-quarter shipments look to re-

The copper price scene

CURRENT SITUATION: The market remains basically soft—aggravated by order cancellations and stretchouts, as two of the red metal's key markets (construction and autos) remain in the doldrums. Right now, it looks as though producer shipments will do little more than equal last year's disappointing levels. Indeed, add in lackluster overseas buying, and **Free World refined consumption may actually be off about 1% from last year's 7.3 million tons**—a figure which, in turn, was off 3% from 1979. Prices continue easy, backing and filling in the low 80-85¢/lb range.



DEMAND: Next year looks considerably better—if, as expected, interest rates begin to moderate. Car sales could be up about a million units (to near 10 million). And housing starts could rise to near 1.4 million units—quite low but a lot better than 1981's dismal 1.2 million performance. **The longterm outlook: Global use through the mid-1980s is expected to rise about 3% a year.** True, fibre optics could cut into some communications markets, but this could be offset by gains in electrical vehicles and solar energy use.

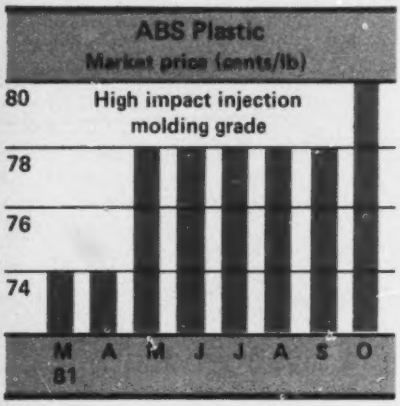
SUPPLY: Producer inventories are in fairly good shape—with Free World refined stocks the equivalent of only about a 2-month supply—well under the 4-month peak of early 1978. On the other hand, **capacity is more than ample. And it's likely to stay that way**—despite the fact that no major "world class" mine will be coming on stream over the next few years—except possibly for the Sar Chesmeh complex in Iran.

PRICE OUTLOOK: Don't expect current low levels to last forever. Once demand begins to pick up—probably in early 1982—prices should start following suit. The cost squeeze (most producers are barely breaking even today) also suggests rising tags. **By next spring quotes could well be above the 90¢/lb mark**—with any advance beyond that level depending on how fast some of today's depressed copper-using industries pick up. **But talk of $1.50/lb metal seems premature**—despite the fact that producers say they need such prices to justify new expansion.

main relatively flat at around the 21-21.5 million-ton mark—thus ruling out any significant nearterm price advance. Import competition (over 18 million tons will enter the country this year) could be a further restraining factor on prices. Next year, meantime, is expected to get off to a slow start. But a gradual demand pickup could bring shipment totals into the 93 million-ton range—enough to support an average price advance of 8-10%.

ABS plastics

List prices are going up. But market levels are likely to lag the 4-6¢/lb advances suggested by new book levels. Best bet: about a 2¢/lb market lev-



el increase which would bring quotes for high impact injection molding material up to about 80¢/lb. One factor limiting increases is excess capacity. The industry is operating in the low 60% range—and substantial new additions are scheduled to come on stream early next year.

Chlorine

New attempts to post a $15-20/ton increase in off-list prices are running into buyer resistance—as demand continues to lag. Consensus is that any significant increase will have to wait on a major recovery in PVC and other downstream products. Meantime, large-volume customers can probably continue purchasing this key inorganic chemical for as low as $95/ton—not even within shooting distance of the average $145/ton producer list.

Aluminum

Still no sign of any upturn for the light metal. In fact, as things now shape up, domestic shipments could be off as much as 3% this year. And with U.S. producer stocks at a high 4½-month supply, production cutbacks are accelerating. In any case, U.S. primaries are now operating at only around the 80% level. Add in high overseas stocks, and any nearterm price recovery seems remote—with merchant ingot remaining some 20¢/lb under producer official lists. Price hikes next year also won't be that easy to come by as industry operating rates fail to rise above the 85% level.

Specialty steel

Price weakness is becoming increasingly evident as demand lags expectations. Examples: (1) A 7% October increase in high speed steels has been deferred indefinitely and (2) the current erosion in recently boosted stainless steels. On the latter score, less than half of a 7½% boost in sheet has held up because of widening discounts. Substantial shading has also been reported in stainless plate—with discounts ranging as high as 12-18% noted on some types.

Petroleum

The longterm prognosis for oil prices is looking increasingly favorable. So say Texaco executives who see increases ranging only 1-2% above the general inflation level over the next two decades. Behind the optimism: Improving supply-demand balance. Another projection by the big oil company: Conservation efforts will continue. Indeed, annual Free World consumption gains are put at less than 1% over this extended period—far below anticipated real GNP growth rates. Moreover, for some key product areas, such as gasoline, usage is expected to remain virtually unchanged.

Lumber

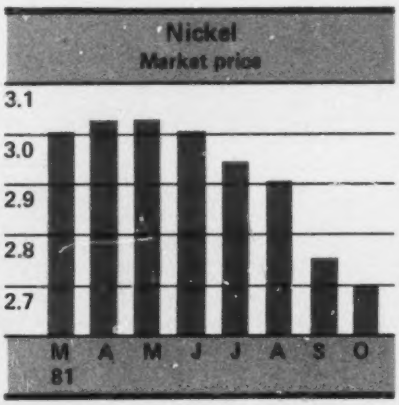
Current depressed markets are likely to continue—on a combination of sagging housing starts and the normal winter slowdown. In any event 1981 will wind up a relatively poor year—with production now put at only 30 billion board feet—down 2.4 billion from last year. Prices, meantime, continue to slip—and could edge even lower in the months immediately ahead despite the fact that some producers have dropped operating rates down into the low 60-70% range.

Lead

Prices are levelling off after recent sharp declines. But little nearterm bounceback is anticipated as battery makers continue to work off inventories and production (following the recent rash of strikes) begins to rise. But several factors could busy the market over the longer pull: (1) any big increase in Soviet buying, (2) an especially severe winter, and (3) the closing of the Bunker Hill facility and its 140,000 tons per year of capacity. The latter, if nothing else, would mean an end to current domestic supply-demand balance.

Nickel

Spot markets look to remain quite weak into early winter—with prices holding in the low $2.70/lb range—well under the official $3.45-3.50/lb producer list. Behind the easiness: poor



demand (Free World usage this year is expected to be hard pressed to reach last year's 1.15 billion lb level). Next year, however, looks a lot better, with a 10%-plus gain being projected. The longer-term prognosis also looks fairly rosy (3.5% annual advances through the mid-1980s). But even with such gains, there should be more than enough metal to go around.

Benzene

A huge inventory overhang (recently put at over 450 million gallons—the equivalent of a 5-month supply) is expected to keep tags under downward pressure. A sign of the times: current spot barge offerings at some 10¢/gallon under the recently reduced con-

Predicts...

trast level. Behind much of the easiness: Poor demand from such key derivatives as styrene and cyclohexane—products which account for a large percentage of normal sales volume. True, producers are now slashing output. But anything even remotely resembling a balanced market is at least 3-6 months down the road.

Pulp

Not even a recently scaled down increase in Canadian softwood kraft material (to only $565/metric ton) is likely to hold. Indeed, it's conceivable that renewed discounting could bring quotes down back to the old $530/ton level as demand for fine papers continues to disappoint. Adding to possible downward pressure are possible sales by integrated pulp and paper companies if they can't sell their finished paper products. Prices of the latter, incidentally, will also remain under pressure, with increases especially hard to come by over the next few months.

Tall oil fatty acids

Prices of this key paint, soap, and detergent feedstock continue on the soft side—with acids containing more than 2% resins being discounted by as much as 6-7¢/lb. More significant, the easiness is expected to spill over into early 1982 as (1) paint demand remains slow, and (2) vegetable oils provide increasing competition in the big soap and detergent market.

Uranium

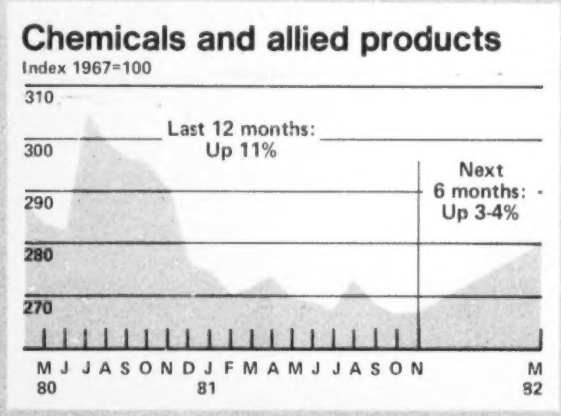
The depressed nuclear fuel may be ready to bottom out—as producer output cutbacks begin to have an impact. It should mark the end of a two-year price decline. Over that time, tags have been virtually halved—dropping from $43/lb in 1979 to $23.50/lb currently—with the latest return not even permitting some producers to recoup direct costs. But by 1985, the current supply glut should just about disappear—and prices are expected to rise above the $25/lb level. ***PW***

The chemicals price scene

CURRENT SITUATION: Overall demand, while less than previously anticipated, continues to run moderately above last year. Based on year-to-date performance, for example, the overall advance could be around 4%—just about recouping last year's loss. **Capacity, meantime, remains far under preferred levels—limiting price increases,** despite still-rising material, labor, and distribution costs. Average hikes over the past six months have only been on the order of 3%—with some areas such as aromatics and plastics subject to considerable discounting.

DEMAND: Next year, which is expected to get off to a relatively slow start, should end up with average gains in the 4-5% range—about twice the expected overall business growth rate. Some areas, like plastics, will do considerably better, with another double-digit advance anticipated. Organic chemicals should also outperform overall averages. **And the uptrend is expected to accelerate over the following year (1983)** when an improving GNP could bring annual chemical consumption and production increases up into the 6% range.

SUPPLY: Very few problems here—with even the recent shortage in caustic soda beginning to ease. One measure of overall availability is the industry operating rate—**currently in the low 78% range and expected to edge up only to 80-81% next year as new capacity continues to come on stream.** On the latter score, the production potential for organics should be up about 4% next year—with an even more impressive 7% gain seen for plastics.



PRICE OUTLOOK: Much depends on crude oil tags. But if one assumes moderation here, then advances over the next six months are likely to be quite modest—**maybe 3-4% for the industry as a whole. After that, however, improving demand should permit bigger increases with averages for the year up about 8-9%.** But organics and plastics, which have been extremely depressed, should move up a lot faster—perhaps as much as 15%—as vendors move to beef up currently sagging margins.

Moderate gains for steel prices and shipments

Supply-demand balance and continued competition from imports mean that increases will be less than dramatic

Look for somewhat smaller price increases in steel next year—despite expectations of a modest improvement in overall demand.

So predicts the DRI Steel Service as it takes another good, hard look at this bellwether industry. Some of the econometric consulting firm's more specific projections for the upcoming year are:

- Domestic list prices could rise by 9% or less in 1982—though market quotes could be up more if today's big discounts begin to narrow.
- Domestic shipments could rise to near 9 million tons—a fair-sized 5-million-ton advance over this next year's expected level—but still well under the 100-million-ton high hit back in 1979.
- Import prices could show a relatively small 6% advance next year—and incoming overseas volume will remain high at around 17 million tons.
- Few problems on availability are seen—aside from selected pipe and tube products. But there could be some tendency toward tightening in sheet products toward 1983.

Coming back to price—the slight 1982 list price deceleration in domestic steel (to a near 9% rate) is based on several factors—including (1) some modest improvements in productivity and labor cost, (2) a lag response of prices to improving market conditions, and (3) continuing import competition.

Looking a little more closely at the labor and productivity factor, DRI cites some encouraging trends. For one, the yield of shipments from raw steel (measured on a 12-month moving average basis) had been rising—from an average of 71.7% in 1977 to near 74.9% for the year ending July 1981.

Much of this can be traced to the increasing emphasis on continuous casting, where the share of output using this advanced technique has risen from 11.9% in 1977 to 20.3% currently. Equally significant, investment in continuous casting capacity is a high-priority item in the steel industry's spending plans.

Also worth noting on the productivity front: The 12-month moving average of man hours per ton shipped has declined to 6.8 for the period ending in July 1981—down from 7.7 in 1973 and 8.7 in 1975.

If these productivity trends continue, (as is likely) and if the steel labor agreement of 1983 is moderate (which is quite possible), the cost pressure on steel prices will be much reduced, and price hikes due to strong demand relative to capacity will be smaller than otherwise would be the case.

A few further comments on imports also are in order; specifically, why DRI anticipates a relatively low 6% price increase for next year.

For one, the Japanese cost inflation—the basis for setting trigger (floor) prices on imports—remains low. Then, too, the high value of the dollar over the past year will be moving into the calculation of import triggers over the next several quarters—thus further dampening any price hikes.

But don't expect this relatively tolerable price pattern—both in domestic and import steel—to continue indefinitely (see Fig. 1). According to DRI equations, for example, you can look for hefty increase in both domestic and imported steel prices by the following year (1983) in the range of 11-12%.

Shifting to the demand sector, DRI analysts feel that the industry will be lucky to ship 88 million tons of finished steel this year—because of (1) sluggish steel consumption, (2) drawdowns of user inventory, and (3) continued high imports.

Whether the weakness extends into 1982 depends very much on interest rates. A steady and convincing decline in interest rates could spark a steel recovery led by the automotive market starting late in the first quarter and joined by capital goods in mid-1982.

But strength of any upturn is likely to be modest initially. In any case, the DRI shipment figure for 1982 is put at only 93 million tons—and it is only in the following year (1983) that totals will again approach triple digit levels.

Meantime, as suggested earlier, import tonnages will continue to play a major role. Sparked by relatively favorable prices, 18 million tons or more will find their way into the country this year—with only a slight decline toward 17 million tons projected for both 1982 and 1983.

Taking a look at availability, DRI notes no current problems—except for pipe and tubing imports, which are currently soaring due, in part, to a domestic supply-demand shortfall.

But that's not to say there could not be other problems by 1983. To better evaluate the product-by-product supply outlook, DRI prefers to study demand in terms of previous peaks—assuming that these previous peaks can be used as an approximate measure of capacity or availability.

As one spokesman puts it, "Whenever the shipment rate begins to exceed 90% of its previous peak on a sustained basis, it could well be a signal of possible tight supplies and rising cost pressures."

In any event, the data shown in Fig. 2 would seem to confirm the efficiency of this approach. Note, for example, that domestic shipments of pipe and tubing are already above their previous peak. Equally significant, sheet mill products are only five percentage points from the critical 90% cutoff point—suggesting that if auto, industrial machinery, construction, and appliance markets pick up, there could eventually be some tightness in this category, too.

To better evaluate the possibility of such tightness (and, hence, increased upward price pressure) in steel sheet and other key product lines, analysts

present the following detailed outlook for demand in major user areas:

■ **Transportation:** Recovery here is expected to be led by purchases of cars and trucks. Domestic retail car sales are forecast to rise by 24% from 6.6 million units in 1981 to 8.2 million in 1983, with 8.0 million 1982. Dealer deliveries of trucks are forecast to rise by 34% from 2.39 million in 1981 to 3.20 million in 1983. Moreover, the import share of cars is expected to drop by about 5%.

The transportation market should also get a lift by 1983 from railroad freight car shipments, which are expected to be about 41,000 in 1981, somewhat lower in 1982, then jumping to the range of 45,000-50,000 for 1983, according to the DRI Transportation Service.

All these gains have to be regarded as bullish for steel, since even during the relatively depressed period of the last 12 months, shipments to transportation categories accounted for about 28% of total steel mill product apparent consumption.

■ **Construction and equipment:** Pick-up in this segment, which chewed up 22% of all steel mill products over the past 12 months, will be led by purchases of capital goods. Business fixed investment in real or deflated terms is forecast to rise by 1.9% in 1982 over 1981, and by another 5.5% in 1983.

■ **Appliances and cars:** While the 9% steel products share of the past year doesn't seem all that large, some good gains are likely. Housing starts (sales of appliances to the replacement market are fairly well correlated with sales to the new home market) will be the catalyst here. The DRI economy forecast sees housing starts moving up to 1.7 million units by 1983, a rise of more than 45% over 1981's expected 1.16 million.

To sum up: Not too many problems—either pricewise or supply-wise—are seen for steel buyers over the next few quarters. But closer monitoring is certainly recommended by late in the year and in 1983—as (1) markets gradually come back into closer supply-demand balance and (2) cost pressures mount. ***PW***

Fig. 1

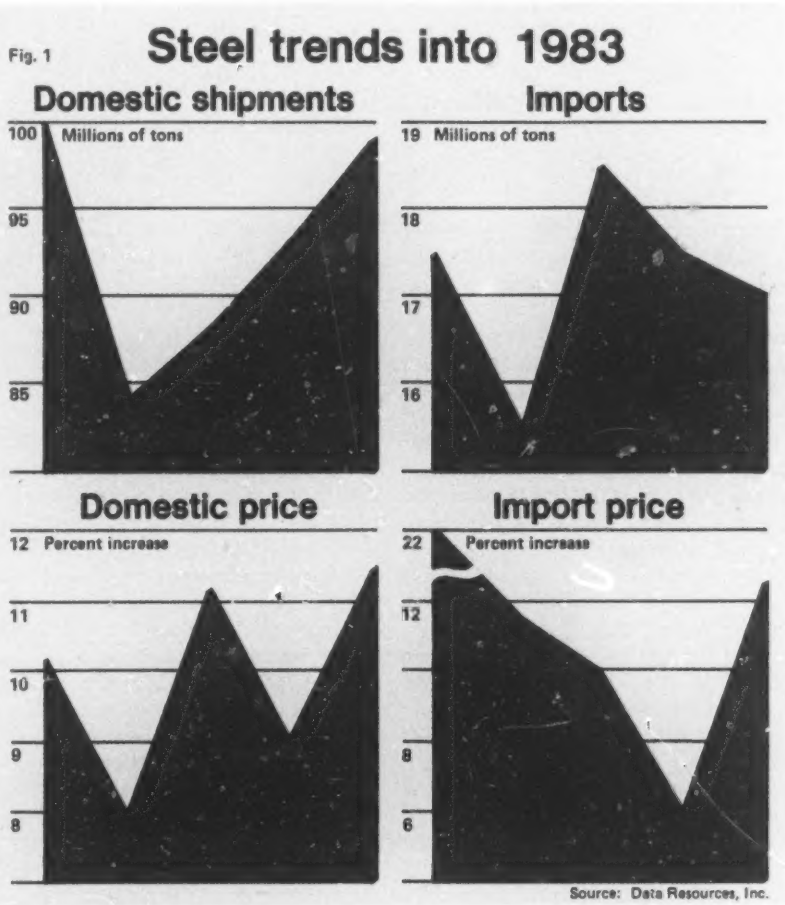
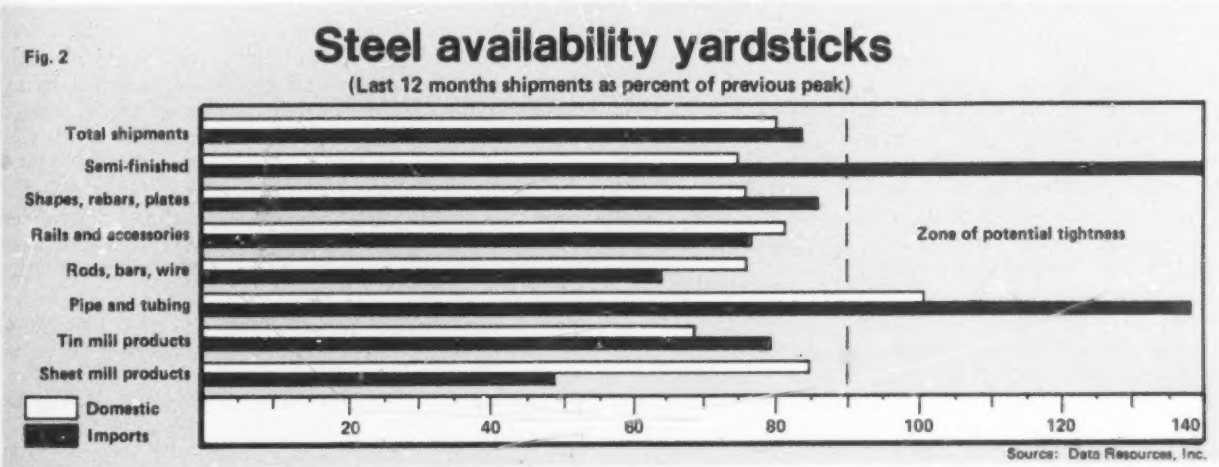


Fig. 2



Information processing means growth for office supplies

It's a brand-new ballgame as far as office equipment supplies are concerned. The typical purchasing executive is likely to be spending a lot more on a substantially changed mix of products in the years immediately ahead.

The accent will be on information processing supplies where sales in real terms are expected to more than double over the 1980-85 period.

So predicts Frost & Sullivan in a new 295-page report pinpointing technological and market changes that are occurring in this rapidly growing industry. Among other things, the New York-based consulting firm predicts that increasing reliance on electronic devices (for the transmission, storing, retrieving, and viewing of information) will ultimately mean a decline in the use of paper.

The new study also forecasts an accelerated capital investment pace for office equipment. Thus, product life cycles—now running about six or seven years—are expected to shorten to near three years.

As for product-by-product buying trends, here's what Frost & Sullivan says you can expect in six key information-processing supply sectors over the 1980-85 period.

■ **Magnetic media:** Eye-opening growth is seen here, with total outlays in constant dollars rising from less than $200 million (at retail) to near $1.6 billion in just five years. That's the equivalent of a 40% annual growth rate.

The greatest price advance will be on soft-sectored media (see table), particularly the 5.25-in. diskettes. Magnetic cards and cassettes will be largely replaced by disks and diskettes.

■ **Ribbons:** The retail market for both typewriter and word-processing ribbons will nearly quadruple, from $305.7 million to $1.1 billion (in constant dollar terms). On the typewriter ribbon front, the market will remain near its current size of about $242 million. But the product mix will change drastically as correctable ribbons account for about 80% of the total market and fabric and single strike film ribbons decline in usage.

■ **Print elements:** There will be major shift here away from the ball type and toward daisy wheels. The daisy wheel elements will grow from 6 million to 16 million unit and, in constant dollar terms, from $77 million to $181 million. Plastic wheels will outnumber metal wheels by nearly eight to one. The overall element market will rise from $179 million to $280 million.

■ **Correction media:** There will be an overall decline in correction media, from $306 million to $282 million, but a substantial increase in one medium—lift-off tapes, which are used with correctable-type ribbons. As the use of word-processing equipment and correcting typewriters increases, the need for coverup types of correction media will decline.

■ **Dictation media:** The greatest change here will be a doubling of microcassette machines and the virtual elimination of magnetic belt equipment.

The dictation supplies market will grow to nearly three times its current size, from $54 million to $151 million. This constant-dollar growth will be paced by the rise in microcassette sales from $15 million to $84 million.

■ **Copier supplies:** Copier supplies will double, from $1.7 billion to $3.4 billion. The bulk of the market will be in papers for plain-paper copiers ($2.4 billion) and their toners and developers ($460 million).

To sum it all up, the traditional office supplies market (fueled by the transition of the office to computer and other electronic-based equipment) is being rapidly transformed into an information-processing supplies market.

As a result, supplies used in the automated office—e.g., magnetic media, print elements, copier supplies, and the like—will more than double over the first half of the decade. Frost & Sullivan's estimate here: A $6.8 billion constant-dollar market by 1985. ***PW***

Information processing supplies: Portrait of a growth market

Product category	Percent increase, 1980-85 (constant dollars)
Magnetic media	
Soft-sectored	887%
Hard-sectored	137
Cards, cartridges, cassettes	711
Typewriter ribbons	
Correctable film	32
Multistrike film	–1
Singlestrike film	–61
Word processor ribbons	
Multistrike film	1196
Singlestrike film	1277
Fabric	1950
Print elements	
Ball type	–15
Cup type	200
Daisy wheels	137
Correction media	
Cover up	–38
Lift off	25
Dictation supplies	
Magnetic belt	–51
Magnetic disc/cartridge	–1
Standard cassette	78
Minicassette	99
Microcassette	460
Copier supplies	
Paper (plain)	139
Paper (thermal)	–23
Paper (coated)	–41
Dry toners and developers (plain-paper copiers)	149
Liquid toners and developers (plain-paper copiers)	102
Liquid toners and developers (electrofax copiers)	–42

Latest scrap quotations

	New	Month ago	Year ago
Steel, No. 1 hvy., dlvd., Pitts., ton	96.00	102.00	104.00
Steel, No. 1 hvy., dlvd., Clev., ton	88.00	94.00	80.00
Steel, No. 1 hvy., dlvd., Chi., ton	82.00	92.00	91.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.70	0.71	0.84
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.62	0.63	0.71
Brass, red, East, wholesale buy, dlvd., lb.	0.66	0.67	0.80
Brass, yellow, East, wholesale buy, dlvd., lb.	0.40	0.42	0.40
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.31	0.31	0.39
Alum., mixed clip, E., wholesale buy, dlvd., lb.	0.345	0.345	0.425
Zinc, old, East, wholesale buy, dlvd., lb.	0.150	0.155	0.130
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.25	0.27	0.29
Passenger tires, mill purchase, ton	16.00	16.00	16.00
Butyl tubes, mill purch. (free of valves), lb.	0.065	0.065	0.065
Black natural tubes, mill purch. (free of valves), lb.	0.060	0.060	0.060
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	20.00	20.00	20.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	13.00
Polyethylene scrap, lb	0.20-0.30	0.20-0.30	0.20-0.30
Polystyrene scrap, lb.	0.18-0.25	0.18-0.28	0.18-0.28
Polypropylene scrap, lb.	0.12-0.18	0.12-0.18	0.12-0.18
ABS scrap, lb.	0.18-0.28	0.18-0.28	0.18-0.28
Roofing rags, No.2, dlr., lb.	Nom.	Nom.	Nom.
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.13	0.13	0.15
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.25	0.25	0.38

Foreign dependence growing

Import dependence on crucial materials continues to grow—with two recent studies pointing up the seriousness of the situation.

The first, prepared by Bache, suggests the following percentages of U.S. needs that are being imported: antimony (53%), chromium (91%), cobalt (93%), germanium (11%), manganese (97%), rhodium (87%), tantalum (97%), and titanium (17%).

Equally disturbing is another report worked up by Simon Strauss, the chairman of the Minerals Availability Committee of the American Mining Congress. He notes that not only the United States but the entire industrialized West is now substantially dependent on either the Third World or the Eastern Bloc for many key metals.

Here's how he figures output is divided among the three groups:

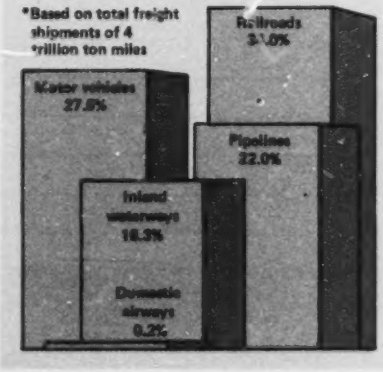
Key minerals production

	Industrial West	Eastern Bloc	Third World
Copper	36%	21%	43%
Iron ore	39	34	27
Lead	47	31	22
Manganese	28	46	26
Nickel	38	30	32
Tin	7	24	69
Tungsten	29	45	26
Zinc	52	25	23

Rails' growth seems assured

Don't count the railroads out. They'll continue to haul a substantial portion of the nation's overall freight over the next 15 years.

Intercity freight in 1995: Rails will stay No. 1*



At least that's the forecast being made by Predicasts, a big Cleveland-based consulting and research firm. More to the point—railroads, which hauled 2.5 trillion ton-miles of freight last year, are expected to increase their total to near 4 trillion by 1995.

The equivalent of nearly a 3% average annual gain, this would seem to assure a continuing number-one position (on a ton-mile basis) for this transportation mode. Indeed, in terms of share, it suggests that slightly more than one-third of the nation's freight will continue to be shipped by rail.

All this is in sharp contrast to the past decade or so when the railroads' share of the freight pie dropped from near 42% (in 1967) to 35%.

One critical factor behind the steady 3% annual growth rate being projected is the exploration of the nation's coal resources—with the most rapid growth here expected in the late 1980s. By 1995, railroads are expected to carry nearly 70% of the nation's coal traffic.

But there are other factors behind the projected overall rail growth trend, too. Specifically, deregulation is expected to help substantially—as will increased grain shipments.

As might be expected, the projected showing will mean substantial purchases of new railroad equipment—enough to push the dollar value of such equipment sales to over $50 billion in 1995 (compared to only $11.8 billion last year).

Significant growth is seen for (1) freight cars, (2) maintenance-of-way equipment, and (3) rail material and supplies such as ballasts, rails, and crossties. ***PW***

Increasing use of foreign steel

Latest steel buyer and service center reports confirm the fact that imports are again beginning to play a more significant market role.

Some 88% of the purchasing managers responding to the latest NAPM steel buyers survey, for example, now say that overseas prices are under comparable domestic levels—with 12% dubbing the differences as substantial. Not surprisingly, some 15% are also contemplating more dependence on foreign metal over the next 3-6 months.

Steel distributors tell much the same story. Specifically, some 80% of Steel Service Center Institute (SSCI) members note lower prices on imported carbon steel—with 30% putting the price break in the relatively significant 10-20% range. And here, too, there has been a modest increase in those who expect to increase their dependency on overseas metal in the months ahead.

Here's a rundown of developments in other key steel marketing areas:

■ **Inventories:** Little basic change from the previous month is noted (see top chart). Although buyers managed to reduce their metal holdings slightly (to just over a 2-month supply), small increases were reported on the service center level.

But while the magnitude of holdings remained relatively unchanged, both groups feel that their inventory levels are still top heavy. On the buyer front, for example, nearly two out of every five respondents felt their stocks were "too high"—versus not a single PM who felt his tonnage was on the low side.

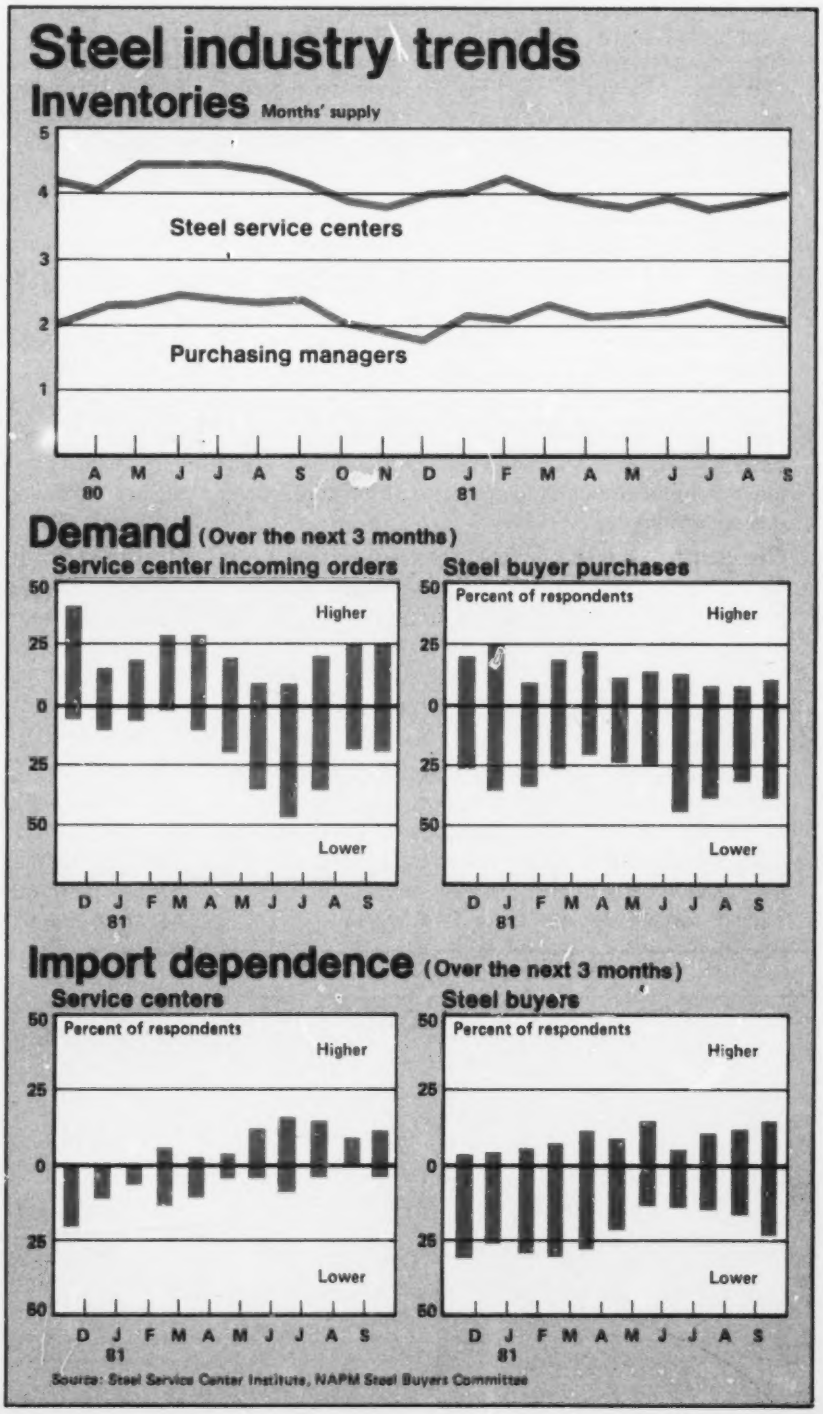
And the picture is similar for service centers—58% classifying inventory levels as too high with, again, not one single "too low" estimate.

These evaluations, in turn, suggest some further retrenchment ahead. The pertinent findings here: Roughly three out of every five buyers and service centers now comtemplate inventory reductions over the next few months.

■ **Demand:** This resolve to cut stocks stems in large part from the relatively poor outlook for steel consumption. In any event, far more buyers and service centers expect a nearterm slowdown rather than acceleration.

The situation is probably best summed up by Andrew G. Sharkey, SSCI president, who notes that there is much less optimism than a year ago. On a rosier note, he says that no one expects any sharp downturn and that the outlook for 1982 continues to be positive.

■ **Availability:** The "no sweat" situation of the past few months shows little sign of change. True, there are some exceptions, but they are relatively minor. Only two respondents—one on the service center level and the other a buyer—are experiencing problems in the steel bar area. Earlier bottlenecks in heat-treated metal also seem over—with only one buyer and two distributors reporting difficulties here. ***PW***


Steel industry trends
Inventories Months' supply
Steel service centers
Purchasing managers
A M J J A S O N D J F M A M J J A S
80
81
Demand (Over the next 3 months)
Service center incoming orders
Steel buyer purchases
Percent of respondents
Higher
Lower
D J F M A M J J A S
81
Import dependence (Over the next 3 months)
Service centers
Steel buyers
Source: Steel Service Center Institute, NAPM Steel Buyers Committee

Shorter leadtimes reported for fourth straight month

The current sluggish order pattern continues to make for a basically "no sweat" procurement situation.

That's not to say that a few leads haven't stretched out a bit. But these have been more than offset by better delivery performance in other areas—thus, continuing to keep ***PurchasingWorld's*** exclusive leadtime index under the neutral 50 level for the fourth straight month (see chart).

In any event, waits on more than one-third of the 158 product lines regularly monitored by ***PurchasingWorld*** are now under year-earlier levels. That's all in sharp contrast to the usual fall trend when a seasonal pickup normally results in some overall deterioration in vendor performance. Note, for example, the modest leadtime uptrend reported in late 1980.

Further confirmation of ready availability comes from the latest NAPM Business Survey Committee report which suggests that 17% of responding buyers are now experiencing faster deliveries. That's almost double the 9% who note some slippage over the latest 30-day period.

And as has been the case in recent months, the list of items in short supply remains quite slim—now limited to just oil-country tubular goods, seamless steel pipe, bearings, and caustic soda.

Not surprisingly, buyers continue to play their inventory cards close to the vest—with parers now outnumbering accumulators by a better-than-2:1 margin. Equally significant, nearly one out of three currently report reductions—the biggest such number in well over a year. ***PW***

Leadtimes and availability

Chicago: Delays have narrowed for a few items—specifically with these new (lower) leadtimes in weeks: paper (1-3), PVC resins and powders (1), c-r steel sheet (4-5), h-r sheet (2-3), coated sheets (4-5), capacitors (4-6), and semiconductors (6-14)—with the upper end of the range in electronic items reflecting custom orders.

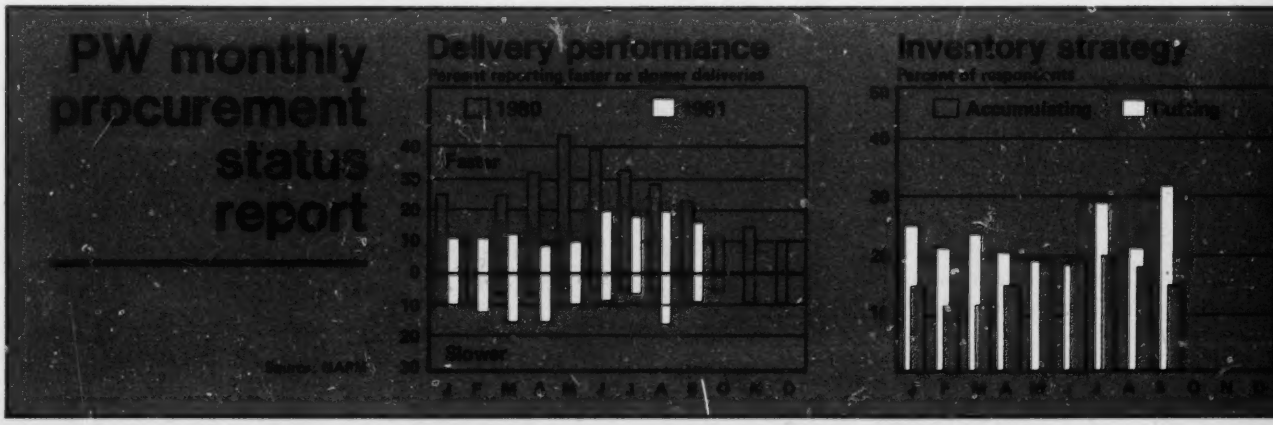
Cleveland: A few minor shifts this time around. Cold-finished aluminum is out a bit (to 14 weeks). And both polyethylene and PVC now require 3-4 weeks. On the other hand, coil-coating paint waits are down (to 3-4). Unchanged items include corrugated (3), folding cartons (4), steel canisters (6), lumber (3), and strapping (3).

Houston: Some narrowing is noted in structural steel (to 13-21 weeks) as fabricator business lags. Ditto, in mill steel (to 6-12) as mill backlogs decline. Chemical waits are a bit lower (to 2-4). And the same is possible for tungsten carbide parts as new capacity comes on. Plastics remain stable at around 4-8 weeks.

Los Angeles: Synthetic rubber is in a bit (to 2-3 weeks). So are nonclay fillers (2), PVC resins (2), paints (3), heavy-duty steel (9-10), aluminum pipe (8-12), and heavy copper tubing (13-17). But filler clay is out (to 4) as is heavy aluminum sheet (to 48-52). Unchanged are galvanized steel (10-12) and insulators (7).

Philadelphia: Steel leads remain unchanged—but some see reductions in plate over the next few weeks from the current 4-5 week wait. Cellophane has come in—to 4-6. But folding cartons are out to 6-8. No change in corrugated (1-3), foam packaging products (2-3), linear ICs (12), wood resin (13), and pumps and valves (17-20).

Pittsburgh: Leads remain relatively unchanged—with these typical waits (in weeks): multiwall bags (10-12), plastic bags (3-4), corrugated (3-4), standard steel drums (2-3), natural kraft paper (4-6), lumber and plywood (2-4), plastic packaging material (2-4), steel strapping (2-3), polyethylene and PVC (3).



Leadtimes (in weeks)

Steel

	Now	Month ago	Six months ago
Sheet (Phil)	5	5	5
C-R Sheet (Chi)	4½	5½	8½
Plate (Phil)	2½	4½	8½
Plate (Chi)	2	2	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	8½	8½	8½
H-R Bars (Chi)	2	2	2½
Cold-Drawn Bars (Phil)	12	12	12
Galvanized (LA)	11	11	12
Galvanized (Chi)	4½	5½	8½
Structurals (Chi)	2	2	2½
Structurals (Hous)	17	30	30
Tubing (Phil)	10	10	10
Greyiron Castings (LA)	4	4	5½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	22	22	18

Electric & Electronic

Cables (Chi)	10½	10½	10½
Capacitors (Chi)	5	7	7
Circuit Breakers (Chi)	6	6	6
Electro-Mech. Devices (LA)	9	9	10
IC's (Linear) (Phil)	12	12	12
Motors (Phil)	21	21	21
Motors 1000 HP & up (Hous)	39	39	39
Printed Circuit Boards (Chi)	6	6	6
Relays (Chi)	12	12	12
Resistors (Chi)	8	8	8
Resistors, Wirebound (Phil)	18	18	18
Transformers (Chi)	10	10	10

Lumber

Hardwood (Pitts)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chi)	2	2	2½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pitts)	3	3	3
Particleboard (Phil)	2½	2½	2½

Packaging

	Now	Month ago	Six months ago
Bags, Kraft (Pitts)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pitts)	11	11	11
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	4	4	4
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pitts)	7	7	7
Cellophane Wrap (Phil)	5	7	7
Plastic Bags (Pitts)	3½	3½	3½
Plastic Pkg. (Pitts)	3	3	5
Shrink Film (Chi)	6	6	6
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pitts)	7	7	3½
Drums, Steel Stand (Pitts)	2½	2½	2½
Wood Pallets (Chi)	2½	2½	5
Wirebound Boxes (Pitts)	6½	6½	6½
Strapping (Clev)	2½	2½	2½
Strapping (Pitts)	3	3	3

Chemicals-Plastics

Adhesives (LA)	½	½	½
Naphthalene (Chi)	2	2	2
Paint (LA)	3	4½	3
Paint, Coil Coating (Pitts)	3	3	3
Paint, Maint. (Clev)	2	4	2½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2½	2½	2½
Polyethylene Resin (Pitts)	3	3	3
PVC Resin (Chi)	1	2	2
PVC Resin (Pitts)	3	3	3
Titanium Dioxide (LA)	1	1	1

Paper

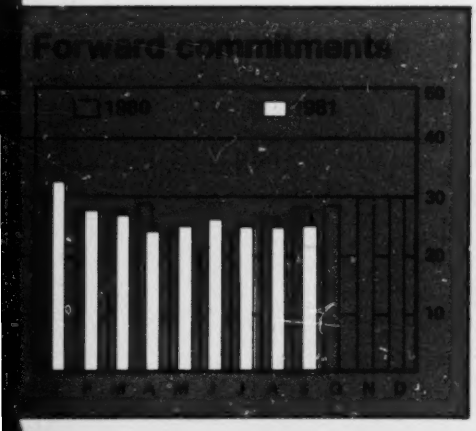
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pitts)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pitts)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pitts)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pitts)	5½	5½	5½

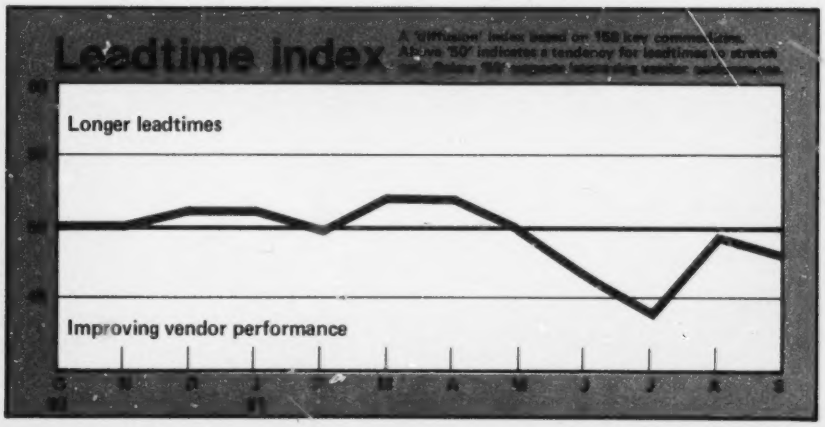
Nonferrous

	Now	Month ago	Six months ago
Aluminum Coil (Chi)	8	8	10
Aluminum Plate (Chi)	8	8	10
Aluminum Sheet (LA)	11	11	13
Aluminum Sheet (Chi)	8	8	11
Brass Castings (LA)	7	7	8
Brass Rods (Chi)	10	10	10
Brass Sheet (Chi)	9½	9½	9½
Brass Tube (Chi)	9	9	9
Copper Fittings (LA)	7	7	8
Copper Mill Prod. (Pitts)	6	6	6
Copper Tube (LA)	7	7	8
Copper Tube (Phil)	6	6	6
Lead (Pitts)	3	3	3
Magnesium (Pitts)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pitts)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pitts)	6	6	6
Wire, Specialty (LA)	7	7	8
Zinc (Pitts)	2	2	2

Miscellaneous

Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	52	52	52
Compressors, Centrifugal (Hous)	57	57	57
Compressors, Reciproc. (Hous)	45	45	45
Fasteners (Chi)	½	½	½
Fasteners (LA)	4½	4½	6
Fasteners, Standard (Phil)	3½	3½	3½
Meat Exchangers, Carbon-Alloy Steel (Hous)	41	41	41
Heat Exchangers, Hi-Pressure (Hous)	41	41	41
Insulation Mat'l. (LA)	7	7	6
Machined Parts (Hous)	12	12	12
Pipes & Valves (Chi)	½	½	½
Pumps (Hous)	41	41	41
Pumps (LA)	11	11	9
Rubber, Synthetic (LA)	1½	2	2
Rubber Hose (LA)	6½	6½	7
Tungsten Carbide Parts (Hous)	16	16	16
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

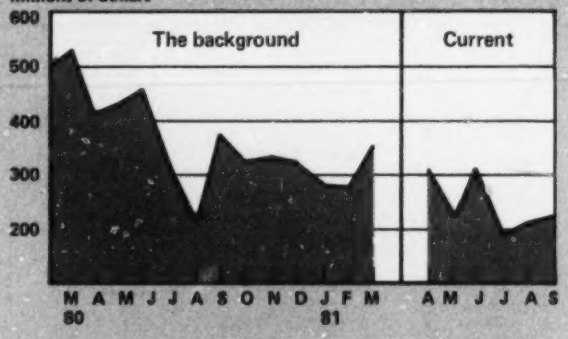



Leadtime index
A "diffusion" index based on 150 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" indicates improving vendor performance.
Longer leadtimes
Improving vendor performance
O N D J F M A M J J A S
1981

Leading indicators

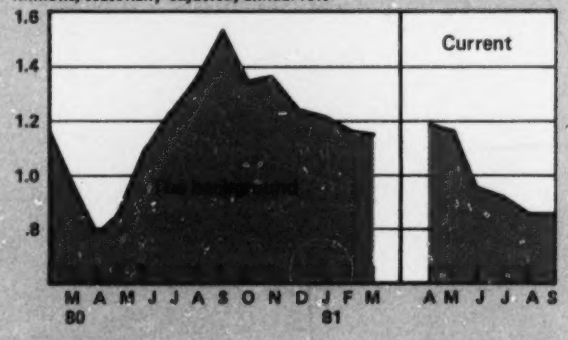
1. Machine tool orders

Millions of dollars



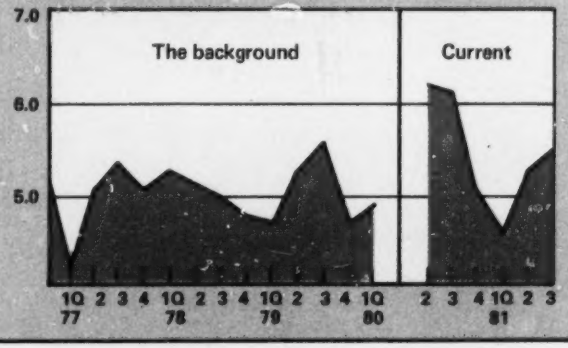
2. Housing permits

Millions, seasonally adjusted, annual rate



3. Savings rate

Percent



Business in brief:

Early 1982 upswing is unlikely

Hopes for a fast 1982 start are fading fast.

One reason is that leading business indicators—those that signal production and sales 2-3 months down the pike—can hardly be characterized as bullish. Uncle Sam's composite barometer has been edging down for several months running—and the NAPM Business Barometer (see graph) is down at near 45.

Still, it's nowhere near as low as during the 1974 recession when this key yardstick of future activity was down close to the 30 level. But the current lackluster performance would seem to rule out any really significant near-term improvement in the overall business climate.

Today's sky-high interest rates are still another factor to reckon with. And even if the cost of money does start edging lower, it will be at least another several months before this will translate into higher construction and consumer buying activity.

In part, this is due to the high interest rates. But another factor is today's low factory utilization rates—currently pegged at only 79%. That's the lowest reading in over a year and more than 10 full points under preferred levels.

And if equipment orders can be said to be disappointing, the housing situation can only be described as a disaster. Take housing permits—a lead indicator of starts. As of latest report, the figure was near 900,000 units on a seasonally adjusted annual basis (center chart)—a far cry from the 1.4-1.5 million level of just a year ago.

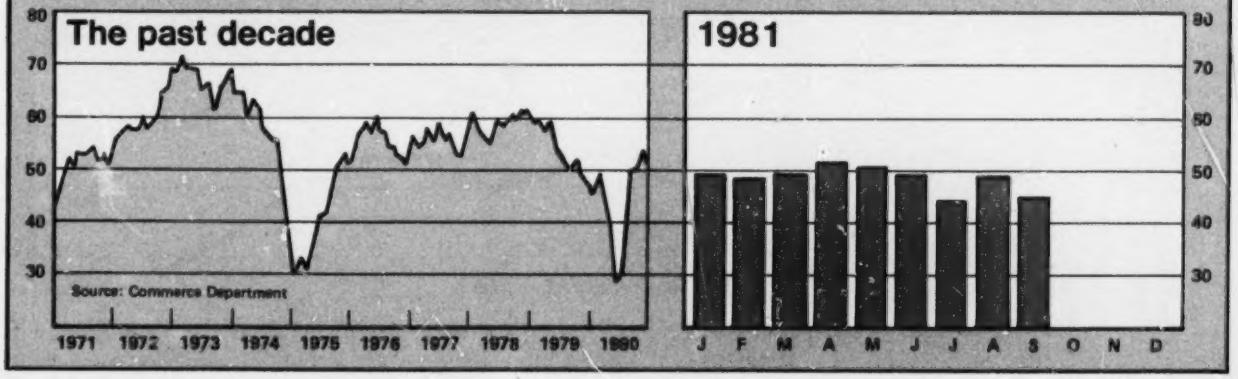
Then there's the consumer. The typical family has become a little more cautious. And while the current savings rate—pegged at roughly 5½% of take home pay (bottom chart)—isn't overly excessive, it's hardly the stuff that booms are made of.

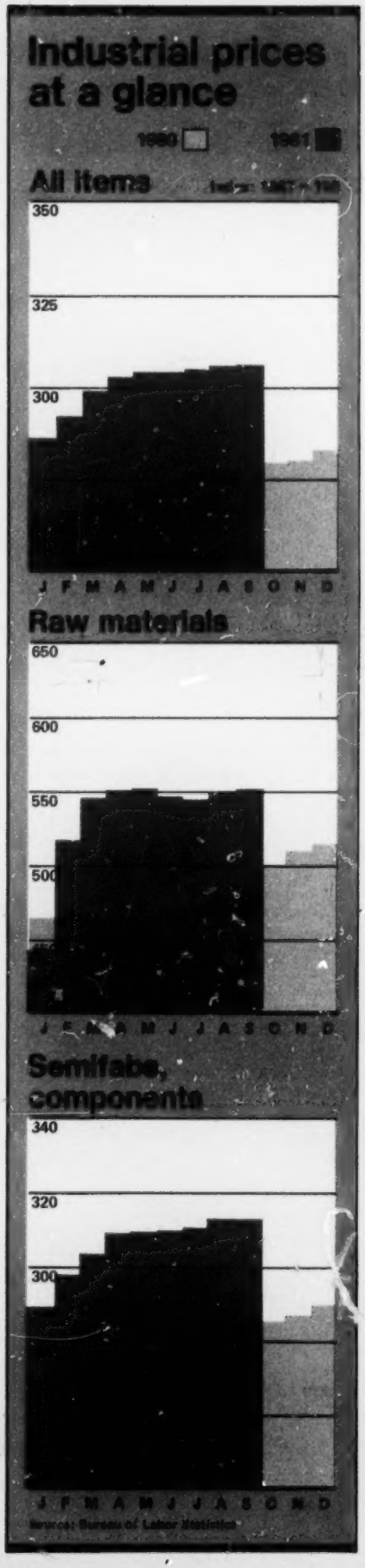
Things could get a bit better, but current statistics don't suggest any serious downturn either—not with the huge backlog of pent-up consumer demand and the surprisingly good shape of business inventories.

Upshot: Look for another 3-6 months of backing and filling—with the long-awaited recovery pushed ahead until sometime next spring. ***PW***

NAPM business barometer

Based on five monthly indicators (employment, inventories, new orders, production, vendor performance)





Prices lowest in years

Industrial producer prices continue to take a breather—with the rate of advance now at the lowest level in several years. Equally significant, most economists expect the trend to persist—putting advances in the 6-8% annual rate through early winter.

That's not to say, of course, that everything is coming up roses. In the energy sphere, for example, natural gas hikes remain far too high for comfort. But here, as elsewhere, there is some offsetting good news, with declines reported in residual oil, gasoline, diesel fuel, kerosene, and even gasoline.

Much of the same improving, though checkered, pattern is noted in other sectors. While overall capital equipment remained unchanged, for example, there were some modest boosts in heavy motor trucks, material handling equipment, metal forming tools, and mining machinery.

But the inflation lull is perhaps most pronounced in raw materials—with declines hitting many nonferrous metals, lumber, gypsum, and organic chemicals. The failure of plastic resins to rise very much—despite substantial hikes in lists—also has to be regarded as encouraging. ***PW***

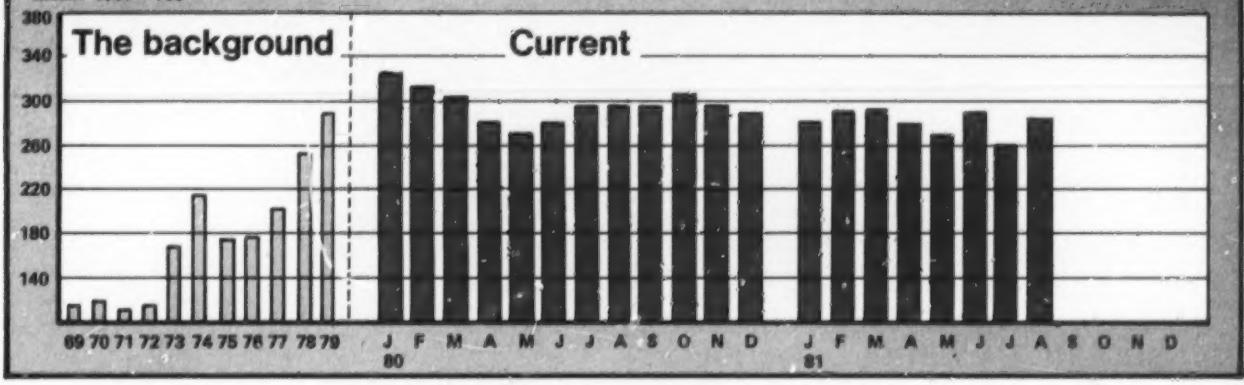
This month's breakdown

	Latest level (June)	Percent change from: Month ago	Year ago
Bearings	316.0	0.7	15.3
Bolts, nuts, etc.	287.2	0	6.6
Chemicals, inorganic	209.4	1.7	18.2
Chemicals, organic	409.2	49.7	11.6
Concrete products	282.8	0	5.6
Cutting tools, small	288.5	0	9.7
Electrical instruments	242.8	0.7	15.6
Electric lamps (bulbs)	276.8	1.2	8
Fans and blowers	328.4	1.0	6.9
Fittings, industrial	304.3	0.4	2.1
Foundry and forge products	334.1	0.7	9.1
Fuel oil (residual)	1197.7	-4.7	24.2
Furniture, commercial	281.5	0.8	10.0
Gasoline	725.8	-0.1	11.9
Glass, flat	218.9	0	9.6
Glass containers	234.8	0	13.8
Gypsum products	252.9	0	13.6
Hand tools	319.8	0.6	12.8
Hand tools, power driven	213.4	0.2	9.1
Industrial furnaces	232.6	0.2	10.8
Integrating and measuring instruments	203.1	0.3	8.7
Internal combustion engines	311.6	2.2	13.1
Lubricating oil	288.1	-1.4	12.1
Lumber millwork	271.2	-0.4	2.9
Material handling equipment	282.6	0.6	10.1
Metal containers	319.8	0.1	6.4
Metal mill shapes	307.2	-0.1	6.1
Metal tanks	311.2	0.8	8.9
Motors and generators	307.3	0.8	13.4
Motor trucks	284.7	-3.0	11.2
Office and store equipment	148.0	0.1	8.2
Paperboard	282.1	0.5	9.6
Paper boxes and shipping containers	249.4	0.3	10.3
Paper office supplies	218.0	0.4	8.2
Paint	251.0	0	4.9
Plastic resins	298.5	1.0	3.0
Precision measuring tools	226.1	0.1	8.1
Pumps and compressors	293.1	0.5	12.9
Refractories	306.0	0	13.8
Rubber belts and belting	207.7	1.0	10.1
Scales and balances	281.3	-0.2	7.2
Steel products	343.1	0.1	14.8
Switchgear	267.3	0.2	8.8
Textiles, synthetic fibers	182.2	0.2	10.3
Textiles, gray fabrics	148.1	-0.1	5.0
Tires and tubes	286.5	2.2	6.9
Transformers and power regulators	314.2	0.3	13.2
Valves, industrial	316.2	0.8	9.2
Welding equipment	265.7	0.8	8.8
Wire and cable	208.8	0.8	4.3

PW raw material price barometer

Index: 1967 = 100

Latest month 285.7
Month before 289.4
Year ago 300.8



Latest spot market prices

Ferrous metals

	Latest price	Previous month	Year ago
Pig iron, basic, valley, gross ton	213.00	213.00	203.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	203.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	21.65	21.65	18.90
Steel, structural shapes, Chi., cwt.	21.65	21.65	18.90
Steel, structural shapes, Los Angeles, cwt	22.15	22.15	19.40
Steel bars, dlvd. Phila., cwt., merchant quality	14.35	14.35	15.50
Steel, bars, Pitts., cwt.	14.35	14.35	15.50
Steel, bars, C.R., Pitts., cwt.	29.20	29.20	30.60
Steel, plates, Chi., cwt.	23.25	23.25	20.70
Steel, plates, Pitts., cwt.	23.25	23.25	20.70
Steel, sheets, H.R., Pitts., cwt	20.80	20.80	18.45
Steel, sheets, C.R., Detroit, cwt.	24.65	24.65	21.90
Steel, strip, C.R., Chi., cwt.	29.05	29.05	27.00
Steel, basic wire, Pitts., cwt.	25.95	25.95	21.20

Nonferrous metals

Aluminum, ingot, lb. (market place)	.76	.76	.76
Alum. sheet, H-14 3003, .04 in., 48x144, mill fin., lb.	1.02	1.02	1.02
Antimony, RRM, (99.5%), Laredo, lb.	2.00	2.00	2.00
Beryllium-copper, cast ingot, lb.	4.11	4.11	4.11
Brass, red, 85%, [sheet], lb.	1.23	1.25	1.29
Brass, yellow, [sheet], lb.	1.17	1.19	1.24
Cadmium, ion lots, lb.	1.60	1.75	2.50
Copper, electrolytic, wire bars, refd., lb.	.82	.85	.90
Copper sheet, over 24 in., lb.	1.32	1.34	1.39
Lead, common, N.Y., lb.	.38	.40	.45
Magnesium, pig ingot, [99.8%], lb.	1.34	1.34	1.25
Mercury, 20 fl. lots, N.Y., fl.	422.00	445.00	395.00
Molybdenum Climax Oxide/bags, lb.	8.25	8.25	9.00
Nickel, electrolytic, producer, lb.	3.50	3.50	3.50
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	9.29	9.55	21.15
Tin, Straits, N.Y., lb.	7.82	7.85	8.48
Zinc, Prime West, East St. Louis, lb.	.463	.493	.375
Zinc, die casting alloy, No. 3, lb.	.528	.558	.425

Chemicals

Acrylonitrile, tanks, lb.	.440	.440	.375
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	195.00
Benzene, petroleum, tanks, Houston, gal.	1.54	1.60	1.60
Caustic soda, 76% solid, drums, carlots, cwt.	17.50	17.50	17.50
Cresylic acid [over 25%], tanks, lb.	.66	.66	.54
Formaldehyde, USP, 37%, [2% to 5% meth.], tanks, lb.	.101	.101	.072
Glycerine, synthetic, tanks, lb.	.805	.805	.710
Linseed oil, raw, bulk, carlots, lb., f.o.b. N.Y.	.345	.345	.325
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.795	.795	.710
Naphthalene, crude, tanks, lb.	.220	.205	.205
Phthalic anhydride, tanks, lb.	.420	.420	.375
Polyethylene resin, high-pressure molding, carlots, lb.	.45	.45	.41
Polypropylene, G-P injection molding, lb., railcar shipment	.50	.50	.36
Polystyrene, G-P crystals, bulk railcar, lb.	.53	.50	.46
Resin, W.G. grade, carlots, f.o.b., N.Y., cwt.	46.50	46.50	45.00
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.375	.375	.358
Sulphur, crude, ex-terminal, Tampa, Fla. long-ton	147.50	140.00	127.50
Sulphuric acid, 66°, commercial, tanks, ton	93.69	93.69	77.25
Titanium dioxide, anatase, reg., carlots, lb.	.69	.63	.57
Xylene, tanks, gal.	1.48	1.48	1.43

Paper

	Latest price	Previous month	Year ago
Bond paper, No. sulfite, water marked, 20-lb., 4 cartons, cwt.	68.60	68.60	68.60
Multiwall kraft paper, 50 lb. basis wt. and above, ton	375.00	375.00	375.00
Offset paper, No. Grade	45.50	45.50	44.30
Reinforced tape, non-asphaltic grade, carload quantities, distribution cost	16.00	16.00	16.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	21.00	21.00	21.00
Kraft linerboard, 42 lb., unbleached, inn	300.00	300.00	270.00

Building materials

Lumber, 2x4 fir, mbf, cl	325.61	335.01	334.03
Lumber 2x4, pine, mbf, cl	296.23	302.77	308.37
Plywood, plyform, 3/4", msf, cl	590.80	597.80	579.53
Plywood, 5/8", msf, cl	349.64	355.88	365.99
Cement, bulk, ton, tl	61.19	60.24	59.01
Sand, ton, cl	6.08	6.05	5.71
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd	45.01	45.06	41.87
Crushed stone, 1½", ton, cl	7.50	7.50	6.91
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.68	0.68	0.66
Gypsum sheathing, ½"x1"x8", msf, tl	147.04	148.04	135.79
Brick, common, per thousand, tl	163.76	163.70	153.40
Asphalt paving, AC-20	169.63	172.13	122.29
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.63	6.57	6.23

Textiles

Burlap, 10 oz., 40", N.Y., yd.	.254	.254	.313
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.01	1.02	.99
Cotton middling, 1", N.Y., lb.	.603	.625	.856
Printcloth, 48", 80x80, N.Y., spot, yd.	.84	.85	.65
Army duck, 37", 13 oz., yd.	1.70	1.70	1.61
Blended printcloth, 64", 78x54, yd.	.77	.76	.75
20s combed yarns	1.85	1.85	1.77
Wool tops, N.Y., lb.	3.60	3.60	3.50

Hides and rubber

Hides, cow, light native, packers, Chi, lb.	.48	.47	.48
Rubber, No. 1 std., ribbed smoked sheets, N.Y., lb.	.465	.525	.790

Fuels

Fuel oil, No. 6 or Bunker C, Gulf., bbl.	23.25	23.25	22.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	32.77	32.77	30.80
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	1.045	1.040	.899
Gasoline, 94 oct., reg., Chi., tank car, gal.	1.003	1.010	.899
Heating oil, No. 2, Chi., bulk, gal.	.960	.970	.794
Heating oil, No. 2, N.Y., bulk, bbl.	101.30	101.30	N.A.
Heavy fuel, PS 400, Los Angeles, rack, bbl.	24.25	23.00	20.50
45 wt. diesel, Gulf, spot, gal.	.898	.898	.775
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.44	.44	.41

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

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